

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

C.A. No. 1:19-cv-12551-FDS

Hon. F. Dennis Saylor IV

**DEFENDANT GOOGLE LLC'S OPPOSITION TO PLAINTIFF SINGULAR
COMPUTING LLC'S MOTION FOR PARTIAL SUMMARY JUDGMENT OF NO
INVALIDITY BASED ON CNAPS AND GRAPE-3**

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I. INTRODUCTION

Singular’s Motion for Partial Summary Judgment of No Invalidity Based on CNAPS and GRAPE-3 (“Motion”)¹ relies on an overbroad reading of the Court’s April 6, 2023 Order regarding *inter partes* review (“IPR”) estoppel (Dkt. No. 447) (“IPR Estoppel Order”).² By reading the Court’s IPR Estoppel Order to bar Google from relying on an obviousness ground that combines indisputably non-barred system art with a printed publication, Singular would effect an unprecedented expansion of IPR estoppel. Effectively, Singular’s reading would mean that the only obviousness grounds permitted after an IPR would combine different pieces of system art—or system art with only publications that could not reasonably have been found at the time the IPR petition was filed.

Yet, Singular’s Motion cites *no* statute or case law supporting its argument that Google is estopped from relying on the CNAPS *system* as the primary reference in combination with printed publications to support Google’s affirmative defense of invalidity under 35 U.S.C. § 103 (obviousness). Significantly, Singular does not dispute in its Motion that Google could not raise in the IPR proceedings the CNAPS *system* or the evidence that Google relies on to prove the relevant details of the system. Thus, Singular’s entire argument turns on its position that Google

¹ Singular’s motion seeks partial summary judgment of no invalidity based on CNAPS and GRAPE-3. On May 19, 2023, Google notified Singular that Google intended to withdraw the GRAPE-3 grounds from its anticipation invalidity defenses, in the interests of narrowing the issues before the Court for trial. Accordingly, Google withdraws the portions of Dr. John Gustafson’s December 22, 2022 expert report (“Gustafson Rep.”) in support of anticipation based on GRAPE-3; specifically: ¶¶ 619-681. Thus, the portion of Singular’s Motion related to GRAPE-3, *i.e.*, Motion at 4-6, is moot.

² Nothing in this Opposition is intended to modify or change the positions that Google took in opposing Singular’s Motion for Partial Summary Judgment of Validity Based on *Inter Partes* Review Estoppel (Dkt. No. 377), and Google reserves its right to assign error on appeal based on that ruling, even if that ruling is interpreted as Google proposes herein.

cannot combine indisputably non-estopped system art with a prior art publication to form an obviousness combination. Numerous court decisions addressing invalidity combinations based on system art and printed publications—including one from this Court—have held that post-IPR estoppel does not apply to bar those combinations. This is why Singular’s reading of the Court’s IPR Estoppel Order would reflect an unprecedented expansion of the scope of IPR estoppel.

Singular reads the IPR Estoppel Order more broadly than just barring Google from using printed publication art with other evidence that does not constitute a printed publication to prove up a prior art system. The obviousness combination it seeks to bar relies primarily on the CNAPS system that Google could not have used in the IPR, either as a system itself or through publications describing the system. Nothing in the Court’s order says that Google is barred from presenting an obviousness combination of such a system with printed publication prior art. Rather, Google understands the Court’s IPR Estoppel Order to bar the use of printed publications as *evidence of a system itself*. The broader reading that Singular posits would bar Google from doing exactly what the Court said Google may do, even after the IPR. Specifically, the Court said it would *not* apply estoppel “to other forms of evidence concerning the existence of such a system or device” and “how [this evidence] . . . renders [the claims] obvious.” IPR Estoppel Order at 11. Yet, under Singular’s interpretation, estoppel *would* apply precisely to whether the CNAPS system renders the claims at issue here obvious when combined with other references, which is an outcome in conflict with the Order. If Singular’s interpretation were correct, the Order would also conflict with extensive case law.

Thus, the Court should deny Singular’s motion, which is based entirely on Singular’s unduly broad reading of the IPR Estoppel Order.

II. ARGUMENT

Singular does not dispute that Google could not have raised the CNAPS system during the IPR proceedings—alone or in combination with a printed publication; indeed, Google was barred by statute from doing so. *See* 35 U.S.C. § 311(b). Moreover, Singular does not say in its Motion that Google’s evidence regarding CNAPS is duplicative of printed publications. Instead, Singular seeks partial summary judgment because Google, through its invalidity expert Dr. Gustafson, relies on the CNAPS system in two separate combinations with printed publications to argue obviousness. Specifically, Google relies on (i) the CNAPS system in view of Tong; and (ii) the CNAPS system in view of Shirazi. Mot. at 2-3 (emphasis added) (citing Gustafson Rep. at 104, 173).³ Google relied on Tong in the IPR and cited Shirazi in its original invalidity contentions served on November 6, 2020. Google does not dispute that it was aware of Tong and Shirazi at the time it filed the IPR petitions that formed the basis of the Court’s IPR Estoppel Order.

Singular argues that Tong and Shirazi “are inadmissible per the IPR Estoppel Order,” and thus, Dr. Gustafson’s “obviousness combination arguments must fail.” *Id.* at 3. But, reading the IPR Estoppel Order to bar Google from presenting system prior art in a Section 103 obviousness combination with printed publication art is not a reasonable interpretation of the Court’s Order, particularly in the context of CNAPS, where Singular does not challenge any of the evidence that Google is using to prove up the CNAPS system itself as inadmissible due to estoppel. That Order defines a “ground” as “an anticipation or obviousness claim,” IPR Estoppel Order at 10, and there

³ “Tong” refers to Johnathan Ying Fai Tong et al., *Reducing Power by Optimizing the Necessary Precision/Range of Floating-Point Arithmetic*, 8 IEEE Transactions on Very Large Scale Integration (VLSI) Systems, No. 3, June 2000 (GOOG-SING-00025253). *See* Dkt. No. 464-4 at 3. The “Shirazi” reference refers to Nabeel Shirazi et al., *Quantitative Analysis of Floating Point Arithmetic on FPGA Based Custom Computing Machines*, Proceedings IEEE Symposium on FPGAs for Custom Computing Machines (1995) (GOOG-SING-00023790). *See* Dkt. No. 464-5.

is no dispute that Google could not have made an obviousness claim based on a prior-art system combined with printed publication art in the IPR. *See* 35 U.S.C. § 311(b). Moreover, this is not a situation where Google is relying “in whole or only in part” on a challenged publication to describe the CNAPS system. IPR Estoppel Order at 11. Rather, as noted above, Singular does not challenge the admissibility of CNAPS as a system or the evidence Google will use to prove it up. Instead, Singular seeks to bar the combination under Section 103 of that indisputably admissible system with other printed publication art. Nothing in the Order supports such a broad reading; to the contrary, Singular’s reading would bar Google from presenting an invalidity ground that it indisputably could not have presented in the IPR, either in form or substance.

Furthermore, Singular’s interpretation conflicts with numerous court decisions, including at least one decision from this Court. Courts have routinely refused to find IPR estoppel applicable in situations such as this, where a patentee seeks to estop an accused infringer from asserting an invalidity defense based on a combination of a prior art *system* with printed publications. In *SiOnyx, LLC v. Hamamatsu Photonics K.K.*, this Court denied the plaintiff’s motion for partial summary judgment of invalidity, to the extent that defendants were relying on “*the product itself*” in combination with other references, including three patent publications “discussed in the IPR petition.” 330 F. Supp. 3d 574, 603-04 (D. Mass. 2018) (emphasis added). This Court’s *SiOnyx* decision is consistent with how numerous other district courts have understood IPR estoppel. *See Chemours Co. FC, LLC v. Daikin Indus., Ltd.*, No. 17-1612 (MN), 2022 WL 2643517, at *1 n.1 (D. Del. July 8, 2022) (denying motion for summary judgment premised on IPR estoppel based on prior art products “alone or in combination with prior art publications”); *Microchip Tech. Inc. v. Aptiv Servs. US LLC*, No. 1:17-cv-01194-JDW, 2020 WL 4335519, at *4 (D. Del. July 28, 2020) (IPR estoppel does not apply to “references based on physical prior art, whether standing alone or

in combination with a printed reference”); *Contour IP Holding, LLC v. GoPro, Inc.*, No. 3:17-cv-04738-WHO, 2020 WL 109063, at *6 (N.D. Cal. Jan. 9, 2020) (agreeing that the defendant could “assert prior art references used during IPR as long as they are combined with art that was not reasonably available during IPR”); *Arendi S.A.R.L. v. Google LLC*, No. 1:13-cv-00919-JLH, Trial Transcript (D. Del. Apr. 24, 2023), at 9-14 (denying request to exclude on IPR estoppel grounds evidence of invalidity based on prior art combinations involving system art) (attached as Ex. 1 to the declaration of Asim Bhansali). The Court should reject Singular’s flawed interpretation of the IPR Estoppel Order, which would place the Court out of step with these other decisions.

Instead, the IPR Estoppel Order should be interpreted to bar Google from using a printed publication as evidence of a system, either alone or in combination with other evidence, in those instances where Singular has carried its burden, as the party seeking to apply estoppel, to show that the document it seeks to bar reliance upon does in fact qualify as a printed publication under the applicable standard. *See Ironburg Inventions Ltd. v. Valve Corp.*, 64 F.4th 1274, 1299 (Fed. Cir. 2023) (holding that the “estoppel burden of proof” rests “solely on the patent owner, as the party seeking to benefit from an assertion of estoppel”) (collecting cases).

Applying that interpretation, Singular’s Motion as to CNAPS must be denied. It is undisputed that estoppel does not bar Google from presenting CNAPS as a system—including the evidence regarding CNAPS on which Dr. Gustafson relies—and thus, Google should also be allowed to present an obviousness combination that includes CNAPS combined with either Tong or Shirazi.

III. CONCLUSION

For the foregoing reasons, the Court should deny Singular's Motion for Partial Summary Judgment of No Invalidity Based on CNAPS and GRAPE-3, with the order being on the merits as to the CNAPS combination and based on mootness as to GRAPE-3. *See supra* note 1.

Respectfully submitted,

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